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**EXPLORING VALUE AS THE FOUNDATION OF VALUE PROPOSITION
DESIGN**

**(Previously titled: “RECONSIDERING VALUE CREATION AND CAPTURE
THROUGH BUSINESS MODELS: INTEGRATING THE RESOURCE-BASED
AND MARKET-BASED VIEWS”)**

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EXPLORING VALUE AS THE FOUNDATION OF VALUE PROPOSITION DESIGN

ABSTRACT

Purpose: Business models define the activity system that an organization employs to create and capture value. As such, business models are essentially the application of strategic management. The term business model, however, suffers from definitional ambiguity which makes the construction of effective business models problematic. We argue that this ambiguity is largely due to a lack of clarity around value. This paper seeks to provide clarity around value and in doing so aid in the development of effective business models.

Design/methodology/approach: Theoretical paper that deconstructs value into use value and exchange value and develops these concepts.

Findings: We deconstruct value into use value and exchange value to explain the micro-conditions of value creation and capture. In doing so, we also provide an explanation of how VRIN and non-VRIN resources can be traded for gain as well as opening up greater strategic options for managers in their development of business models.

Originality/value: Despite the ubiquity of business models, their micro-conditions are largely assumed and therefore lack theoretical rigour. This paper aims to address this issue via deconstructing value and in doing so explain how value is created and captured.

Keywords: business models, value, rent appropriation, competitive advantage, resource-based view

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1. Introduction

Business model is a term that is widely used in boardrooms, by managers in organizations, by consultants, by commentators of business, and even on radio and television programs aimed at the general public. Indeed it is more widely used than almost any other concept in strategy (Baden-Fuller and Morgan, 2010). The ubiquity of the term and its uses suggest that business models are profoundly important to the work of organizations.

Business models define how an organization delivers value to customers, entices customers to pay for that value, and how this value is shared between the customers and the organization (Blyler and Coff, 2003; Zott and Amit, 2007; Amit and Zott, 2001). Or more simply, “a business model is a framework or recipe for making money – for creating and capturing value” (Afuah, 2014). It is suggested that a “good” business model yields value propositions that are compelling to customers, achieves advantageous cost and risk structures, and enables significant value capture by the business that generates and delivers the products and services (Teece, 2010).

As is evident from these definitions, value and value proposition design is central to business models (Osterwalder et al., 2015). Yet, despite the prominence, we contend that value is poorly defined and under theorised, and this is hindering business model development.

In the following we highlight the issues surrounding value. We then expand on value creation and value capture via developing the use value and exchange value constructs in ways that enable us to resolve this confusion. Via clarifying the issues, and developing constructs that help to resolve this confusion, we hope to aid the understanding of value and in doing so business model construction.

2. The Problems with Value

Value is typically treated as an outcome of business activity (Conner, 1991), and even recent theoretical advancements maintain the same standpoint: that “there is minimal theory explaining ‘how’ managers/firms transform resources to create value” (Sirmon et al., 2007, p. 273). Instead, “value” is used as a catch-all term focused on value for the consumer and wealth for the organization. This is problematic. For example, Porter defines value as “the amount buyers are willing to pay for what a firm provides them. *Value is measured by total revenue ... A firm is profitable if the value it commands exceeds the costs involved in creating the product*” (1985, p. 38); and Barney notes that a firm’s resources and capabilities “are valuable if, and only if, they *reduce a firm’s costs or increase its revenues* compared to what would have been the case if the firm did not possess those resources” (1997, p. 147, emphasis added). We contend that both of these definitions are limited and inadequate as the first employs revenue, and the second profit, as a proxy for value. These definitions do not locate the drivers of value creation, explain how value is created, or who captures the value and why. Moreover, they do not define the nature of the value that is generated and captured either. These issues have been repeatedly neglected (Alvarez and Barney, 2004; Coff, 1999).

While studies have considered the erosion of resource stocks (Dierickx and Cool, 1989) and changes in the value of resources (Miller and Shamsie, 1996), there is ignorance about how value is created from the acquisition or development of resources and resource combinations.

More problematically, the notions of value creation and competitive advantage risk being a tautology under its present definition. If value creation begins by providing

value to consumers, the firm that produces greater value to consumers then enjoys a competitive advantage providing increased organizational wealth (Hoopes et al., 2003; Powell, 2001; Sirmon et al., 2007). Yet, providing value to the consumer does *not* necessarily translate to the organization generating profit from this value as it is entirely possible that the resource provider or consumer may capture much of the surplus (Coff, 1999).

Furthering these problems, advantage may not accrue to the firm holding the most resources as bounded rationality leads to difficulties in realizing the value among resources. Bromiley & Fleming (2002) argue that given the same set of resources, the causal chain linking those resources to performance remains ambiguous and depends on decisions managers make—some will use resources well, other will squander them, and managers may respond differently to opportunities and threats in the markets regardless of resources held. Framed in the context of value, if it is assumed that value derives from the possession of resources, such an assumption negates the problem of how managers connect resources together and it further negates a view that the value of resources connected together may be greater than the simple sum of those resources in the context of the market. In other words, value may come from the integrated web of ties among resources being connected together, i.e. the constructed business model, whether acquired or held internally or both. Thus, the manner in which resource are orchestrated or arranged can create quite different outcomes (Sirmon et al., 2011; Holcomb et al., 2009).

Together these theoretical problems give rise to important research questions about business models: What forms does value take as a resource undergoes a process of transformation into a product or service? And does the linking or chaining of

resources hold the potential to intensify value creation and capture?

3. Unpacking Value

We contend that value is not only poorly defined but poorly theorized. We develop the constructs *use value* and *exchange value* in ways that enable us to resolve this confusion. *Use value* is the benefit received from resources and capabilities and *exchange value* is the money that change hands when resources, products, or services are traded (Lepak et al., 2007; Bowman and Ambrosini, 2000). The internal assets and activities of the firm, is the domain of use values. In contrast, *exchange value* is a function of market relationships between economic agents. Problems arise when we fail to distinguish between these two forms of value. For example, in treating value as a single body or single item, we fail to distinguish at what point particular resources and activities become valuable and in what ways.

Our theorization of value in terms of use value and exchange value provides a basis to understand how the broader resource base of the firm and its market interactions can contribute valuable properties to a final good or service that provides a defensible advantage in comparison to competing alternatives. This understanding is fundamental to the construction of a firm's business model.

We focus our theoretical development on resources and how their use defines market position, viewing the sourcing and orchestrating of resources across the firm as the business model. In doing so, we seek to integrate resources formally in established views of business models. Business models have been defined as representing the substance and configuration of “transactions” - capturing how the firm engages in “economic exchanges” to create value (Amit and Zott, 2001, p. 511; Zott and Amit,

2007, p. 181). We contest these economic exchanges are primarily to source resources as the basis to shape products and services from which value flows, and where linkages among resources create an inimitable web of value that makes a business model hard to replicate.

Many scholars emphasize the importance of firm differences in explaining heterogeneous performance among firms, and conceptualize firms as *unique* bundles of resources and capabilities to this end (e.g., Penrose, 1959; Wernerfelt, 1984; Barney, 1986; 1991). Under the principles of the resource-based view, “RBV resources” are ones that possess characteristics of being valuable, rare, inimitable, and non-substitutable - a set of characteristics commonly known as the “VRIN” criteria. Under these criteria, non-VRIN resources - or resources deemed as readily available or not unique - are seen as trivial to value creation because they can either be readily copied or acquired.

While it is generally argued that VRIN resources are critical to firm performance, the trading of these resources is difficult as a firm can conceivably end up paying out the entire value of the resource to the seller (Dierickx and Cool, 1989). Given traditional economic assumptions made about actor rationality and optimization behavior, it has been argued that only through luck or superior foresight can a firm “gain” in the trading of RBV or VRIN resources in strategic factor markets (Barney, 1986). Relying on “luck” is a sub-optimal solution in itself and others posit that if a firm cannot gain from buying such resources, it should instead invest in developing such resources internally (Dierickx and Cool, 1989).

These traditional assumptions about rationality and optimization have been contrasted by a behavioral logic which argues that, owing to constraints of bounded rationality

and causal ambiguity, different perceptions may exist among managers and firms about the nature of a resource (e.g., whether it is a VRIN resource or not) and its use (whether it is seen as valuable or relevant to the firm or not) (Bromiley and Fleming, 2002). Employing such behavioral insights, a buyer of a resource may then conceivably gain value should a firm owning a resource not detect its VRIN properties in comparison to a buyer who can see its value potential.

Whilst these behavioral insights are informative, we believe that the underlying “economic/rational” foundations can be built upon more fully to explain how advantage can be gained via resource transfer. We suggest that this economic structure should be more fully articulated prior to overlaying the behavioral insights. In doing so we can have a fuller understanding of the micro-conditions of value creation, value capture and business model construction.

We propose that treating a resource *in isolation* misunderstands its value creating potential. We posit that use value is driven by resource combinations, rather than the resource in isolation: it is how a resource is combined with a firm’s other resources and capabilities that creates use value (Moran and Ghoshal, 1999; Adegbesan, 2009, Vargo et al., 2008). An acquired resource *in combination with* the existing resource base of the firm enables resources that are VRIN or otherwise to be traded for advantage without luck. These ideas speak to recent developments in the RBV about resource orchestration (Sirmon et al., 2007; 2011), which advocates the bundling, structuring, and leveraging of resources into combinations which are then seen as the vessels containing value. However, the work on resource orchestration so far does not explain the causal mechanisms behind value creation and value capture in terms of the *interrelationships* among individual resources at the value level.

In addition to resource value being driven by resource combination providing an explanation of how (VRIN and non-VRIN) resources can be traded in a manner where both firms can gain, this also removes the necessity of resource ownership. Resources do not need to be owned as it is the interrelationships between and among resources that delivers the value. Our view is that a substantial amount of value is generated by and tied up in the usage and not the ownership of the resource, and not in the VRIN or non-VRIN nature of the resource itself. We propose that as a resource is brought into the firm (acquired or developed) its linking with another resource adds use value. As the chain of resource connections build (such as in a process of orchestration), the overall use value grows further, adding VRIN properties to even simple resources (if treated in isolation) and will expand the body of value created beyond the amount of value held by any one resource. We see this argument as significant as it provides clarity around value creation and capture and in doing so opens up new options for the strategist in the construction of business models.

The theoretical development that follows seeks to build on ideas contained in resource transfer and resource orchestration arguments by explaining the causal mechanisms of value. Our logic sits between the RBV transfer perspective and recent works on resource orchestration as we seek to explain how resources can be traded for gain and, because of this logic, how resources do not need to be solely traded for value creation and can be orchestrated to unlock value as well. The result, we argue, is a more complete understanding of value that enables the informed construction of business model activity systems.

To clarify the concept of value, and develop our argument, we investigate use value and exchange value in the context of a business-to-business (B2B) market scenario. A

B2B market scenario is one where a productive resource is sold from a supplier to a buyer in a strategic factor market. The trading of productive resources in strategic factor markets has received much attention in the resource-based literature (e.g. Barney, 1986) and its exploration and clarification is central to the arguments put forward in this paper. A productive resource is one that may or may not be currently in use by the supplier and can be put into use by the buyer in a way that will achieve greater value. This could be the case of purchasing a machine, a brand name, a drug formula or similar. The primary idea is that the resource is traded to a firm that can achieve a higher use value and therefore pay a higher exchange value than the use value achieved by the seller. This results in positive gains for both parties and higher overall levels of value from the resource. We will start by analyzing the transaction from a use value perspective.

Use Value

The use value (UV) of a resource is the benefit achieved by a firm via the addition of the resource. Use value is therefore synonymous with value *creation*. As noted previously, there is much discussion in the resource-based literature around what characteristics make particular resources valuable (Barney, 1986), though there is less written about how and why this is so (Bowman and Ambrosini, 2000). We propose that use value is driven by resource combinations, rather than the resource in isolation (Moran & Ghoshal, 1999). It is how a firm combines a newly-acquired resource with its other resources and capabilities that creates use value. This can be seen as a similar concept to the notion of value co-creation (Vargo et al., 2008).

Despite much of the RBV literature focusing on resource characteristics (e.g., VRIN) as the driving force behind resource value, a central argument of the resource-based

view is that firms are bundles of heterogeneous resources and are therefore themselves capable of heterogeneous outcomes (Barney, 1991; Hughes and Morgan, 2007). From the perspective of resource combinations then, as firms are different resource bundles, they will obtain different use values from the *same* new resource because the subsequent combination with its current resource base will differ. As such the use value of a resource is specific to the firm in question (Adegbesan, 2009).

In other words, given the addition of an identical single resource, the use value achieved will be different for different firms as the remainder of their resource bases will be different, as held within the assumptions of the RBV. Thus, while a resource may hold some intrinsic use value, this value grows as the resource is linked to other resources and capabilities in the firm and this combined value is what we describe as “use value”.

There is no absolute need to distinguish resources based on whether they *appear* to be VRIN or not because these qualities will *differ* between buyers who can employ different (and subsequently VRIN) combinations of an isolated resource when combined with their firm’s existing ones. This observation invalidates simple pricing schemes as a means to determine value. By way of a simple example, a saw handle has no value without a blade. The value created is not then attributable to the saw handle or the blade but rather to the combination of the two—because it is at that point when value is generated. Without accepting this principle, we would have to suspend the acceptance of the view that firms have different use values. In this sense, not only are firms heterogeneous bundles of resources for value creation purposes, they are also heterogeneous in terms of the combinations they are capable of making (Moran and Ghoshal, 1999).

The sequence of resource linking is not important at this stage; rather, it is the bringing of resources together (value between resources) and then the collective addition of resources with other ones in the conversion process (value among resources) that shapes the body of use value.

In monetary terms, use value can be defined as the price the buyer is *prepared* to pay for the resource if there is a single source of supply (Collis, 1994). It has been put forward that use value can be estimated through a thought experiment where a buyer purchases a resource from a supplier. If the buyer is interested in purchasing a resource from the supplier, we can first imagine that the resource is given to the buyer at no cost. The buyer must find this situation preferable to the original situation when they were without the resource:

Now start taking money away from the buyer. If only a little money is taken away, the buyer will still gauge the new situation (product [i.e. resource] minus a little money) as better than the original status quo. But as more and more money is taken away, there will come a point at which the buyer gauges the new situation as equivalent to the original status quo. (Beyond this amount of money, the buyer will gauge the new situation as worse.) The amount of money at which equivalence arises is the buyer's willingness-to-pay [i.e. use value] for the quantity of product [i.e. resource] in question. (Brandenburger and Stuart, 1996, p. 8)

The notion of use value being driven by resource combination is significant for two reasons. First, it allows the trading of resources to occur while achieving benefits for both parties. Second, it allows competitive advantage to be gained via the trading VRIN resources. This distinction is important because trading of such resources for competitive advantage appears to be nominally impossible when use value is

attributed to resources in isolation vis-à-vis resources in combination.

A real-world transaction of this type could be the sale of a new drug compound. In this case, the supplier could be a small R&D company. A large pharmaceutical company could purchase this compound, and combine it with resources and capabilities that the supplier does not possess—such as the ability to go through clinical trials rapidly, along with a global marketing/sales force and distribution—and would be able to achieve greater use value from the compound than the supplier who lacks these complementary resources and capabilities.

As the resource's use value is driven by resource combinations, some of the incremental use value will be delivered by the buyer's current resources and capabilities. Indeed some of the incremental use value *must* be driven by these existing resources and capabilities for the resource to deliver different levels of use value in different firms. For simplicity, we allocate all the incremental use value to the new resource, in terms of its UV. This is because the overall incremental use value would not be achieved without the addition of the new resource to the buyer's current resources and capabilities. Although as exemplified earlier the use value truly derives from the combination of the new resource with an existing resource, but we contend that such a combination could not have been realized without the new resource and therefore for the sake of simplicity it is easier to allocate the value created to the new resource.

Expanding on the second point, much of the RBV literature has focused on resources and capabilities in isolation driving competitive advantage. Essentially resources meeting VRIN criteria are judged to deliver competitive advantage (Barney, 1991). Focusing on the benefits from a resource in isolation brings up the challenge of how

to purchase such a resource without transferring the entire use value of the resource to the resource seller and thereby not gaining from the transaction. The arguments of how to benefit from such a purchase have centered on superior foresight and luck or the need to avoid the market entirely and develop a similar resource internally instead (Dierickx and Cool, 1989). Moving the locus of use value from resources in isolation to resources in combination makes it feasible to purchase a resource that may not be particularly VRIN in itself but can be added to existing resources to create a VRIN resource combination. Or purchase a resource that is VRIN but becomes more so when combined with the buyer's complementary resources and capabilities. As the benefit from the purchased resource is partially already owned by the buyer, the resource can be purchased below the use value that the resource delivers to the buyer. Such a transaction, as highlighted in the previous example, can benefit both firms involved.

Exchange Value

Exchange value (XV) is the *price paid* by the buyer to the supplier of the resource. Essentially it is the value that is captured by the supplier from the use value that is created via the buyer combining the resource with their existing resources and capabilities. The exchange value of a resource will be driven by the competitive dynamics of the market for the resource in question (Iveroth et al., 2012). These markets have been termed “strategic factor markets”. The exchange value of the resource needs to be higher than the use value of the resource to the supplier (UVs), otherwise the supplier would have no reason to sell the resource. Outside this constraint, the exchange value will be set by the competitive dynamics of the market.

FIGURE 1

Use value for different firms

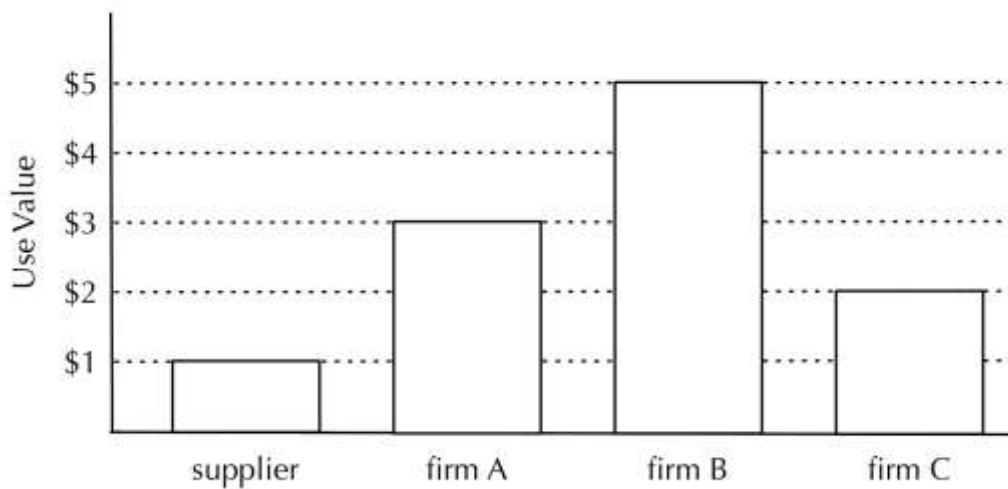


Figure 1 is used to stylize the strategic factor market that the supplier and buyers compete in. Here it can be seen that the supplier and the three firms interested in the resource place different use values on the resource. The resource's use value to each firm represents the expectations of how much use value will be delivered when the resource in question is added to their current unique resources and capabilities. As noted previously, this is *not* an estimation of the use value of the resource in isolation but rather of it in combination. As each firm is different in terms of resources and capabilities, each firm will have a different use value from the addition of the new resource.

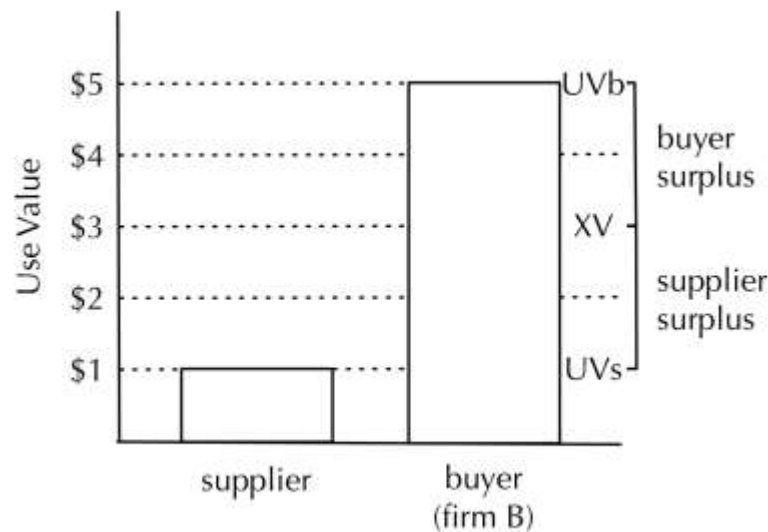
In a normal bidding situation, Firm B would purchase the resource as they place the highest use value on the resource (\$5). As Firm A can only achieve a use value of \$3 from the resource, they would not be willing to bid above this price. Therefore, Firm B would be expected to pay no more than \$3 for this resource as this is the maximum that the firm with the next highest use value estimation (Firm A) would be willing to bid.

Importantly, the supplier is willing to sell the resource as it only achieves a use value

of \$1 when combined with the supplier's other resources and capabilities. Therefore, Firm B could expect to purchase the resource that it values at \$5 for around \$3 and would expect to benefit from the purchase once the resource is integrated with its current resources and capabilities. So essentially, while the "market value" of the resource is \$3, the use value to Firm B is \$5. Firm B is thereby able to purchase the resource and expects to gain from the transaction. The supplier also gains from the sale of the resource as they are only achieving a use value of \$1 from the resource. So the supplier sells the resource for around \$3 and loses \$1 of use value thereby gaining \$2 through the transaction. Firm B purchases the resource for around \$3 and gains a use value of \$5 thereby gaining \$2 through the transaction. As such both parties gain from the transaction (Figure 2).

FIGURE 2

Sharing incremental use value



Use Value and Exchange Value Interaction

The incremental use value achieved from the resource by Firm B vis-à-vis the supplier can be seen as value creation. The exchange value paid for the resource defines how this value created is *shared* between the parties. As such, the combination of use value and exchange value determine the value capture in terms of the surplus that goes to each party.

The minimum exchange value that the supplier would be willing to transact on would be slightly greater than the use value that the resource delivers to the supplier. Similarly, the maximum exchange value that the buyer would be willing to transact on would be slightly less than the use value that the resource delivers when combined with the buyer's resources and capabilities.

There is the risk that if the seller knows (or can deduce) the buyer's use value for the resource, they will seek to extract additional exchange value closer to the buyer's use value. However a rational seller would sell the resource to the highest bidder in the

market as long as that bidder pays an exchange value higher than the seller is able to achieve in terms of their own use value. Under normal circumstances, one would expect sufficient ambiguity on the part of a seller in predicting the potential use of the resource by the supplier to result in different beliefs towards the value of that resource.

The large incremental use value achieved by the buyer, versus the use value achieved by the supplier, would indicate that the use value of the resource is driven more from the buyer's resources and capabilities than the additional resource. If the incremental use value was lower, this would indicate that the use value is driven more by the resource in isolation as both the buyer and supplier are placing high use value on the resource.

In a normal market scenario there are many buyers and suppliers of "resources". Each buyer and seller will make an assessment of the use value that the resource can deliver and the exchange value that will need to be paid to secure the resource. Importantly, the resource purchase will be dependent on the interrelationship of both use value and exchange value in the form of buyer surplus and supplier surplus. If we focus on the buyer perspective, they are not necessarily primarily interested in purchasing a resource that they can achieve the highest use value from, but instead the resource that they will achieve the highest buyer surplus from - this being a combination of both use value and exchange value (i.e. $UV_b - XV$). In effect then, firms are competing in the strategic factor market based on surplus. This surplus is based on the interaction of use value and exchange value.

4. Discussion

Central to our discussion is that traditional resource-based explanations focus on the VRIN nature of the resource in isolation, while we suggest that it is the VRIN nature of the resource in combination with the buyer's existing resources and capabilities that is more important for understanding value creation and capture. The key reason that the firms have different use values for the same new resource is due to these firms being different *bundles* of heterogeneous resources and capabilities (VRIN or otherwise) and are therefore able to construct different activity systems, or business models, with the new resource. In contrast, if the use value was driven by the resource in isolation, it would be expected that the firms' predictions of use values would be far more aligned. In this case, the variation in use value would be driven by differences in the firm's ability to estimate the resource's use value, which is bounded rationally (Bromiley and Fleming, 2002). While this variation in the ability to estimate use value for a resource is still present when use value is driven by the perceived resource combination - and it is arguably an even more complicated calculation - seeing use value as dependent upon the combination of the new resource with other resources and capabilities existing within the buyer provides an alternative explanation for variation in use value and therefore value creation, value capture, value proposition design, and business model construction.

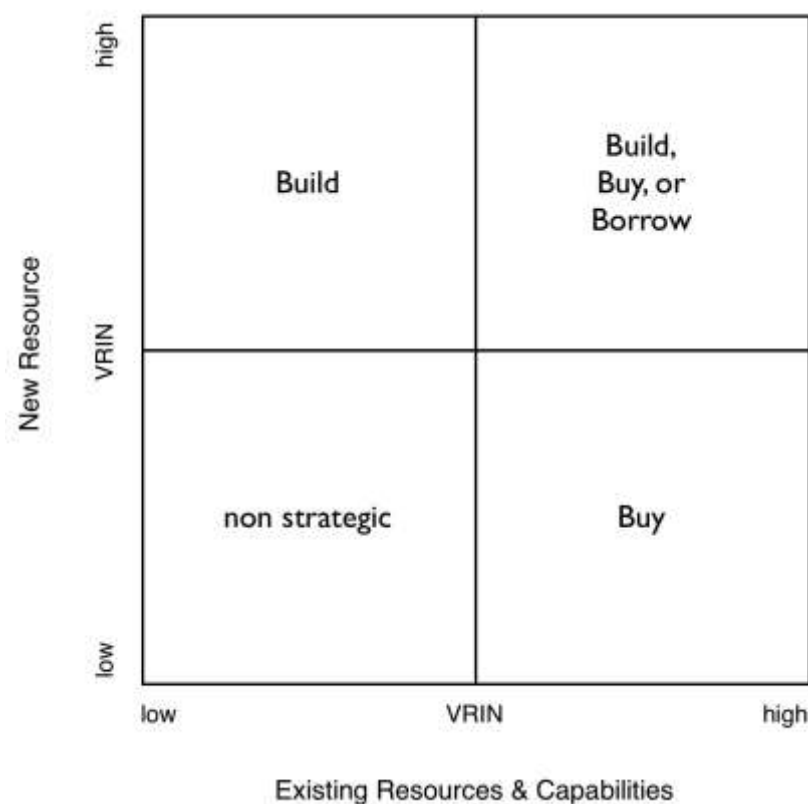
We put forward this argument as an explanation of how firms can purchase VRIN or non-VRIN resources and not pay out all of the benefits associated with the resource, thereby gaining from the transaction. We also show how a VRIN or non-VRIN resource can increase its VRIN properties when it is linked or chained with other resources - generating a higher use value than the resource in isolation would be

capable of.

This is not to say that we disagree with the notion that resources in isolation can be particularly valuable nor that all firms have some existing valuable resources and capabilities. Figure 3 combines both scenarios relating the VRIN nature of the new resource and the VRIN nature of the existing resources and capabilities of the firm. Understanding the nature of the resource base of the firm in question along with that of other relevant resources is central to a firm constructing a competitive business model.

FIGURE 3

VRIN Combinations



The left hand side of this diagram highlights the more traditional resource-based perspective where it is the new resource that is driving the use value. In such a

scenario, it has been noted that it is difficult to profitably purchase the resource without superior foresight or luck (Barney, 1986), and the advice is to build such a resource internally (Dierickx and Cool, 1989). The right hand side of the diagram relates to when the buyer firm has existing VRIN resources and capabilities that can be combined with the resource. In such a scenario it has been argued in this paper that the resource can be profitably purchased. In the scenario where both the resource and the firm's resources and capabilities are VRIN, the upper right quadrant, it follows that either building, buying, or borrowing in some form of joint venture may be appropriate.

Rather than considering resources as absolutely VRIN or non-VRIN, they can instead be seen as on a continuum between the two extremes. By implication, whether a resource is VRIN or not depends on the value its properties and uses hold for one firm over another, and may hold when combined with its existing resources or capabilities. In terms of use value versus exchange value, it is worth noting that the more the supplier's use value is attributed to the resource in question, versus the resources and capabilities of the buyer, the less *incremental* use value (i.e. $UV_b - UV_s$) can be achieved by the buyer via the transfer of the resource. This in turn will mean that more of this use value will be transferred to the seller of the resource in the form of the exchange value payment as the exchange value moves closer to the buyer's use value.

Via the addition of use value being created through resource combination to the traditional perspective we can see that additional options emerge for the strategist for the development of their business model (i.e. Figure 3). They are no longer caught in the dilemma of relying on luck or superior foresight to profitably purchase resources.

Nor are they forced to develop these resources internally to avoid this dilemma and create and capture value. Instead firms have options ranging from purchase, alliance to internal development. These options are available prior to overlaying insights from the behavioral perspective which in turn provide further options and explanations for variation in value creation and capture.

The nature and composition of the mix of resources and capabilities *brought together* creates a potentially difficult-to-replicate business model that can withstand competitive erosion.

Our work contributes to research on the resource-based view, use value and exchange value but especially so to the burgeoning literature on business models. Traditionally, a business model has been conceived of as a system of components, linkages between those components, and the dynamics among those components (Afuah and Tucci, 2000); defining how customers are provided with valuable and meaningful products and services (Mitchell and Coles, 2003), and defining how a firm gains value from the economic exchanges it engages in and the substance and configuration of these exchanges (Amit and Zott, 2001; Zott and Amit, 2007). Until now, the notion of resources, their features, and orchestration as well as market forces in leveraging value has been absent. Our work offers insight that both clarifies the current debate on value creation within business models and extends the debate in new directions. By situating the value problem in business models in the same sphere as the RBV and value research, a more comprehensive understanding can be brought to bear on how and why some firms succeed at generating valuable business models and also the starting points to understand why some business models cause complex rigidities for firms when environmental and market change happens.

5. Conclusion

The objective of this paper was to provide clarity around value creation and capture as the foundation of a firm's business model. In doing so, the intention was to develop an understanding of what value is, what forms it takes, where it is located, and how value is generated from (a) transactions among actors in strategic factors markets and (b) the escalation of use value through combining an acquired resource with existing resources and capabilities en-route to finishing a product or service that can be taken to the market by the buyer. Value is historically poorly conceptualized and is operationalized in highly problematic ways. Seen as a function of total revenue and increases in total revenue, the information lost and information hidden by this proxy prevents scholars from understanding the integrated basis of value underpinning a firm's competitive advantage and prevents managers from understanding the chain among resources and market decisions that are integral to its performance.

We put forward two forms of value. The first, use value, stems from the utility a resource offers when combined with a firm's existing resources and capabilities. The second, exchange value, is the monetary amount that a firm will pay for a resource based on its use value. Use value and exchange value closely relate to value creation and capture. By conceptualizing value in this way, it is possible to foresee how traditionally non-VRIN resources can prove valuable in generating organizational wealth. Moreover, it offers scholars and managers a clear basis and mandate from which to make judgments about how a firm accrues value, in what ways, and the interrelationships among sources of value.

Future Challenges

In this work we show that use value and exchange value are not necessarily mutually

exclusive but co-dependent in raising each other's relative levels. But what we do not consider is the nature of the strategic decisions made by a firm, only how, where, and in what ways value may accrue from decisions made.

It is apparent in our framing of use value and exchange value that the more obscure the causal chain linking together a new resource with existing resources and capabilities, and, the more bargaining power is located in either the buyer or the supplier, the greater the scope for variance in value creation. This is perhaps inevitable in strategic management in that ultimately its purpose is to maximize the amount of value that the buying firm generates, but this may come at the expense of a supplier. There is also the issue that the true value or utility of a resource and its market exchange may only be realized in the future and be more or less valuable than expected. Our analysis does not address this asymmetry problem because it does not change the nature of the forms of value accrued, merely their numerical worth. But in an age of sustainability and responsible action, it does raise questions about how value can degenerate into a different form of zero-sum game than through competitive erosion—the manipulation of value derived by one party (e.g., a buyer) at the expense of fair value to another (e.g., a supplier) owing to differences in the ability to price the future value of the resource or know in advance the real value of a resource when combined with existing assets.

These challenges do not detract from our ability to conceptualize the presence of use and exchange values. Rather, they further underscore how total revenue or increases in income are entirely inadequate ways to conceptualize value. Not only do such proxies risk considerable measurement malaise (Dalton and Aguinis, 2013) they also offer dubious construct validity (Ketchen et al., 2013) with respect to sufficiently

capturing the multifaceted nature of value, let alone sufficient information about value itself. We believe our conceptualization offers firmer ground for understanding how or why some firms outperform others and understanding how interrelationships among resources (especially seemingly innocuous ones) and market decisions come together to generate value and secure competitive advantage. Our theorization of use and exchange values provides a basis to understand how the broader resource base of the firm and its market interactions come together to create a causally complex set of valuable properties that contribute a defensible advantage to a final good or service in comparison to competing alternatives. We believe our work offers the basis for greater rigor and specificity in the study of value, value creation, and value capture by firms and encourage further debate to move away from the unsatisfactory manner in which value is currently defined, depicted, and measured.

References

Adegbesan, J. (2009), On the Origins of Competitive Advantage: Strategic Factor Markets and Heterogeneous Resource Complementarity, *Academy of Management Review*, Vol. 34, No. 3, pp. 463-75.

Afuah, A. (2014), *Business Model Innovation: Concepts, Analysis, and Cases* (1 ed.), Routledge, New York.

Afuah, A. & Tucci, C. (2000), *Internet Business Models and Strategies: Text and Cases*, McGraw Hill Higher Education, New York.

Alvarez, S. & Barney, J. (2004), Organizing Rent Generation and Appropriation: Toward a Theory of the Entrepreneurial Firm, *Journal of Business Venturing*, Vol. 19, No. 5, pp. 621-35.

Amit, R. & Zott, C. (2001), Value Creation in E- business, *Strategic management journal*, Vol. 22, No. 67, pp. 493-520.

Baden-Fuller, C. & Morgan, M. (2010), Business Models as Models, *Long Range Planning*, Vol. 43, No. 2-3, pp. 156-71.

Barney, J. (1986), Strategic Factor Markets: Expectations, Luck, and Business Strategy, *Management Science*, Vol. 32, No. 10, pp. 1231-42.

Barney, J. B. (1991), Firm Resources and Sustained Competitive Advantage, *Journal*

of Management, Vol. 17, No. 1, pp. 99-121.

Barney, J. (1997), *Gaining and Sustaining Competitive Advantage*, Addison-Wesley, Reading, MA.

Blyler, M. & Coff, R. (2003), Dynamic Capabilities, Social Capital, and Rent Appropriation: Ties That Split Pies, *Strategic Management Journal*, Vol. 24, No. 7, pp. 677-86.

Bowman, C. & Ambrosini, V. (2000), Value Creation Versus Value Capture: Towards a Coherent Definition of Value in Strategy, *British Journal of Management*, Vol. 11, No. 1, pp. 1-16.

Brandenburger, A. & Stuart, H. (1996), Value- based Business Strategy, *Journal of Economics & Management Strategy*, Vol. 5, No. 1, pp. 5-24.

Bromiley, P. & Fleming, L. (2002), The Resource-Based View of Strategy: A Behaviorist Critique, in Augier, M & March, J. (Eds.), *The Economics of Choice, Change and Organization*, Edward Elgar, New York, pp. 319-336.

Chesbrough, H. & Rosenbloom, R. (2002), The Role of the Business Model in Capturing Value From Innovation: Evidence From Xerox Corporation's Technology Spin-off Companies, *Industrial and corporate change*, Vol. 11, No. 3, pp. 529-55.

Coff, R. (1999), When Competitive Advantage Doesn't Lead to Performance: The Resource-Based View and Stakeholder Bargaining Power, *Organization Science*, Vol. 10, No. 2, pp. 119-33.

Collis, D. (1994), How Valuable Are Organizational Capabilities?, *Strategic Management Journal*, Vol. 15, No. S1, pp. 143-52.

Conner, K. (1991), A Historical Comparison of Resource-Based Theory and Five Schools of Thought Within Industrial Organization Economics: Do We Have a New Theory of the Firm?, *Journal of Management*, Vol. 17, No. 1, pp. 121-55.

Dalton, D. & Aguinis, H. (2013), Measurement Malaise in Strategic Management Studies the Case of Corporate Governance Research, *Organizational Research Methods*, Vol. 16, No. 1, pp. 88-99.

Dierickx, I. & Cool, K. (1989), Asset Stock Accumulation and Sustainability of Competitive Advantage, *Management Science*, Vol. 35, No. 12, pp. 1504-12.

Holcomb, T., Holmes, R., & Connelly, B. (2009), Making the Most of What You Have: Managerial Ability as a Source of Resource Value Creation, *Strategic Management Journal*, Vol. 30, No. 5, pp. 457-85.

Hoopes, D., Madsen, T., & Walker, G. (2003), Guest Editors' Introduction to the Special Issue: Why is There a Resource-Based View? Toward a Theory of Competitive Heterogeneity, *Strategic Management Journal*, Vol. 24, No. 10, pp. 890-904.

Hughes, M. & Morgan, R. (2007), Deconstructing the Relationship Between Entrepreneurial Orientation and Business Performance At the Embryonic Stage of Firm Growth, *Industrial Marketing Management*, Vol. 36, No. 5, pp. 651-61.

Iveroth, E., Westelius, A., Petri, C.-J., Olve, N.-G., Cöster, M., & Nilsson, F. (2012), How to Differentiate By Price: Proposal for a Five-Dimensional Model, *European Management Journal*, Vol. 31, No. 2, pp. 1-15.

Ketchen, D., Ireland, R., & Baker, L. (2013), The Use of Archival Proxies in Strategic Management Studies Castles Made of Sand?, *Organizational Research Methods*, Vol. 16, No. 1, pp. 32-42.

Kyhna, J., & Nielsen, C. (2015), Value Proposition Design: How to Create Products and Services Customers Want. *Journal of Business Models*.

Lepak, D., Smith, K., & Taylor, M. (2007), Value Creation and Value Capture: A Multilevel Perspective. *Academy of Management Review*, Vol. 32, No. 1, pp. 180-194.

Miller, D. & Shamsie, J. (1996), The Resource-Based View of the Firm in Two Environments: The Hollywood Film Studios From 1936 to 1965, *Academy of Management Journal*, Vol. 39, No. 3, pp. 519-44.

Mitchell, D. & Coles, C. (2003), The Ultimate Competitive Advantage of Continuing Business Model Innovation, *Journal of Business Strategy*, Vol. 24, No. 5, pp. 15-21.

Moran, P. & Ghoshal, S. (1999), Markets, Firms, and the Process of Economic Development, *Academy of Management Review*, Vol. 24, No. 3, pp. 390-413.

Osterwalder, A., Pigneur, Y., Bernarda, G., Smith, A., Papadacos, T., Kyhna, J. et al. (2015), Value Proposition Design. *Journal of Business*, Vol. 3, No. 1, pp. 81-89.

Osterwalder, A., & Pigneur, Y. (2010), *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, John Wiley & Sons, New York.

Penrose, E. (1959), *The Theory of the Growth of the Firm*, Wiley, New York.

Porter, M. (1980), *Competitive Strategy*, Free Press, New York.

Porter, M. (1985), *Competitive Advantage*, Free Press, New York.

Powell, T. (2001), Complete Advantage: Logical and Philosophical Considerations, *Strategic Management Journal*, Vol. 22, No. 9, pp. 875-88.

Priem, R. & Butler, J. (2001), Is the Resource-Based “view” a Useful Perspective for Strategic Management Research?, *Academy of Management Review*, Vol. 26, No. 1, pp. 22-41.

Sirmon, D., Hitt, M., Ireland, R., & Gilbert, B. (2011), Resource Orchestration to Create Competitive Advantage: Breadth, Depth, and Life Cycle Effects, *Journal Of Management*, Vol. 37, No. 5, pp. 1390-412.

Sirmon, D., Hitt, M., & Ireland, R. (2007), Managing Firm Resources in Dynamic Environments to Create Value: Looking Inside the Black Box, *Academy Of Management Review*, Vol. 32, No. 1, pp. 273-92.

Teece, D. (2010), Business Models, Business Strategy and Innovation, *Long Range Planning*, Vol. 43, No. 2-3, pp. 172-94.

Vargo, S., Maglio, P., & Akaka, M. (2008), On value and value co-creation: A service

systems and service logic perspective. *European Management Journal*, Vol. 26, No. 3, pp. 145-152.

Wernerfelt, B. (1984), A Resource-Based View of the Firm, *Strategic Management Journal*, Vol. 5, No. 2, pp. 171-80.

Zott, C. & Amit, R. (2007), Business Model Design and the Performance of Entrepreneurial Firms, *Organization Science*, Vol. 18, No. 2, pp. 181-99.